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PRE-APPEAL BRIEF REQUEST FOR REVIEW		Docket Number (Optional) 1052-0009	
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)] on <u>12/28/05</u> Signature <u>Emma L. Meyer</u> Typed or printed name <u>Emma L. Meyer</u>		Application Number 10/691,212 Filed 10/21/2003 First Named Inventor Andrew W. Dombusch Art Unit 2815 Examiner ORTIZ, Edgardo	
Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request. This request is being filed with a notice of appeal. The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided.			
I am the <input type="checkbox"/> applicant/inventor. <input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96) <input checked="" type="checkbox"/> attorney or agent of record. Registration number <u>33,992</u> <input type="checkbox"/> attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 _____		Signature <u>Paul J. Polansky</u> Paul J. Polansky Typed or printed name (512) 327-5515 Telephone number <u>12/28/05</u> Date	
NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.			
<input checked="" type="checkbox"/> *Total of <u>5</u> forms are submitted.			

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CUSTOMER NO.
34456**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant(s): Andrew W. Dornbusch et al.

Title: INTEGRATED CIRCUIT SUITABLE FOR USE IN RADIO RECEIVERS

App. No.: 10/691,212

Filed: 10/21/2003

Examiner: ORTIZ, Edgardo

Group Art Unit: 2815

Atty. Dkt No.: 1052-0009

Confirmation No.: 8353

MAIL STOP AF

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

**REMARKS IN SUPPORT OF
PRE-APPEAL BRIEF REQUEST FOR REVIEW**

Dear Sir:

In response to the Advisory Action mailed November 29, 2005 and the Final Office Action mailed on August 9, 2005 (hereinafter, "the Final Office Action"), Applicant files herewith a Notice of Appeal. In addition, Applicant files herewith a Pre-Appeal Brief Request for Review. The Applicants request review of the following issues:

1. The Written Description of the Application Satisfies §112, First Paragraph, with Regard to Claims 2-7 and 9.

The Final Office Action rejected claims 2-7 and 9 under 35 U.S.C. §112, first paragraph. Claims 2 recites that the first predetermined amount corresponds to an attenuation in a stopband of said first external filter. Claim 9 recites that the first and second predetermined amounts correspond to differences between an attenuation in stopbands of said first and second external filters. Applicant submits that the application provides sufficient disclosure to enable the invention and to satisfy the requirements of §112, first paragraph. *See Reply to Final Office Action*, filed 10/14/2005, pages 7-8. The rejection of claims 2 and 9 is improper and should be withdrawn.

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With regard to claims 3-7, Applicant notes that claim 3 recites that the first and second terminal pairs are located along a first side of said integrated circuit package and separated by a first plurality of intervening terminals. Claims 4-7 depend from claim 3. The written description provides support for one of ordinary skill in the art to practice the invention. For example, the application states in paragraph 0030 states:

Thus as shown in FIG. 4 there are fourteen intervening bond pads between output pins 442/444 and input pins 452/454 for satellite receiver 430, and eighteen intervening bond pads between output pins 472/474 and input pins 482/484 for terrestrial receiver 460.

See Application, pp. 8-9, paragraph 0030.

A worker of ordinary skill in the art would understand this example as one possible terminal in light of claim 3. Thus, the written description satisfies the written description requirement of §112, first paragraph. Therefore, the rejection of claims 3-7 under §112 is improper and should be withdrawn.

2. The Phrase "Said First Predetermined Amount" Has Antecedent Basis in Claim 1.

Claim 2 was rejected under 35 U.S.C. §112, second paragraph, because the term "said first predetermined amount" allegedly lacked antecedent basis. Application disagrees. Claim 1 recites that the "first and second terminal pairs are separated by a first predetermined distance sufficient to maintain an input-to-output isolation therebetween of at least a **first predetermined amount.**" The last term of independent claim 1, from which claim 2 depends, recites "a first predetermined amount." The claim language of claim 2 is consistent with that of claim 1. Moreover, the relationship between the distance and the amount is described in paragraph 0027 on page 8 of the Application. *See Also*, Reply to Final Office Action, filed 10/14/2005, pp. 8-9. Therefore, the rejection of claim 2 under §112, second paragraph, is improper and should be withdrawn.

3. Claims 1-29 Are Allowable over Poulin in View of Williams.

Both the Non-Final Office Action (mailed March 21, 2005) and the Final Office Action (mailed August 9, 2005) failed to establish a *prima facie* case of obviousness, which requires:

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1) there must be a suggestion or motivation to make the asserted combination, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art;

2) there must be a reasonable expectation of success; and

3) the alleged combination teach or suggest all the claim limitations.

See M.P.E.P. §2142. Applicant submits that even if the alleged combination were made, the alleged combination fails to teach or suggest all of the claim limitations (See Office Action Reply mailed 05/26/2005, pp. 7-12, and Reply to Final Office Action, filed 10/14/2005, pp. 9-10), and moreover that there is no suggestion or motivation to make the asserted combination (See Office Action Reply mailed 05/26/2005, pp. 8-9).

Even if the combination were made, applicants note that Williams' filter 16 has two outputs 20 and 22. Neither Poulin nor Williams suggests connecting outputs 20 and 22 back to corresponding inputs of Poulin's integrated circuit 200. Claim 1 however recites a semiconductor substrate that has in combination "a first pair of bonding pads conducting a differential output signal thereon and adapted to be coupled to an input of a first external filter" and "a second pair of bonding pads conducting a differential input signal thereon and adapted to be coupled to an output of *said first external filter*" (emphasis added). Thus, the asserted combination of Poulin and Williams fails to disclose or suggest at least one element of independent claim 1. Applicants note that Poulin merely discloses unspecified RF signals (see, e.g., col. 3, lines 29-32). Williams discloses a SAW filter, but one with only a single-ended input from the output of amplifier 12 (see FIGs. 1 and 2, and col. 2, lines 26-31). Nothing in Poulin or Williams discloses or in any way suggests an integrated circuit comprising a substrate having a first pair of bonding pads adapted to be coupled to an input of an external filter. Moreover, neither Poulin nor Williams shows or suggests a semiconductor substrate that has differential outputs and differential inputs adapted to be coupled to respective inputs and outputs of the same external filter. Williams does not disclose that amplifiers 12 and 24 are disposed on the same semiconductor substrate, and in 1974 when Williams was filed they most likely were not.

With regard to independent claims 15, 21, and 26, as pointed out above, Poulin fails to show or suggest the function of any particular terminals. Williams fails to relate the disclosed SAW filter to integrated circuit terminals. Neither Williams nor Poulin were directed to or even

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recognized the problem of input-to-output isolation on an integrated circuit having terminals adapted to be coupled to both an input and an output of a filter. Moreover since they were directed to problems that were both different from each other and from the present invention, one of ordinary skill in the art would not be motivated to combine them either in the way the suggested or in any way. The only motivation to arrive at the invention of claims 15, 21, and 26 is found in Applicants' own disclosure.

Thus the combination of Poulin and Williams fails to show or suggest: the placement of bonding pads adapted to be coupled to first and second external filters in four quadrants of the semiconductor substrate as recited in claim 15; the placement of integrated circuit package terminals adapted to be coupled to both the input and output of the same external filter at opposite ends of a side of the integrated circuit package as recited in claim 21; or eight integrated circuit terminals adapted to be coupled to first and second external filters at first and second ends of first and second sides as recited in claim 26.

Additionally, there is no motivation to make the asserted combination. Williams discloses a surface wave filter with symmetrical input and output transducers. *See Williams*, Abstract, FIG. 2, and Col. 2, line 62-Col. 3, line 8. The input transducer 28 and the output transducers 30 and 32 of Williams possess mirror image symmetry about a center line 56 such that the output signals at terminals 20 and 22 are in phase and such that parasitic coupling between the input transducer 28 and the output transducers 30 and 32 provide identical output signals. *See Williams*, Col. 3, line 62-Col. 4, line 2.

Poulin discloses an integrated circuit packaging assembly for reducing the length of bond wires transmitting radio frequency signals. *See Poulin*, Abstract, and Col. 3, lines 28-32. The lengths of bond wires 202 are minimized by an asymmetrical placement in package 104. *See Poulin*, Col. 3, lines 30-39.

The asymmetrical placement of Poulin teaches away from the symmetric placement of Williams. Consequently, the references provide no motivation for making the asserted combination in an integrated circuit. Moreover, a worker skilled in the art would not be motivated to make the asserted combination because the symmetrical teachings of Williams are technically inconsistent with the asymmetrical teachings of Poulin. The only motivation to make

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the asserted combination is provided by the disclosure of the present application. Thus, the asserted combination of Poulin and Williams is an impermissible hindsight reconstruction based on the present application. Therefore, the rejection of claims 1-29 over the alleged combination of Poulin and Williams is improper and should be withdrawn.

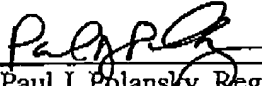
Applicant hereby incorporates and reasserts all of the arguments presented in the Office Action Reply mailed 05/26/2005 in the Reply to Final Office Action, mailed 10/14/2005.

CONCLUSION

As discussed above, the Final Office Action failed to establish a prima facie case of obviousness to support the rejection of claims 1-29. The Final Office Action therefore fails to disclose or suggest each and every element of independent claims 1, 15, 21 and 26, and of claims 2-14, 16-20, 22-25, and 27-29 at least by virtue of their dependency from one of the allowable independent claims. Accordingly, the rejections of claims 1-29 are improper, and the Applicants respectfully request withdrawal of the rejections.

Respectfully submitted,

12/28/05
Date


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